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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/686,676	10/17/2003	Hartmut Pallmann	4632-0102P	7916
2292	7590	11/02/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH			SELF, SHELLEY M	
PO BOX 747			ART UNIT	
FALLS CHURCH, VA 22040-0747			PAPER NUMBER	

3725

DATE MAILED: 11/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/686,676	PALLMANN, HARTMUT	
	Examiner	Art Unit	
	Shelley Self	3725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-20 is/are allowed.
- 6) ☒ Claim(s) 1-9, 21, 22, 25, 26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Election/Restrictions*

Applicant's election with traverse of the invention of Group I (clms. 1-9, 15-22) in the reply filed on August 15, 2005 is acknowledged. The traversal is on the ground(s) that the inventions are not separable because the combination does require the particulars of the subcombination. Applicant's remarks are found persuasive, accordingly the restriction/election requirement is withdrawn and an action on the merits of claims 1-26 follows.

### *Drawings*

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, *the first or second chipping tools have at least one recess formed substantially perpendicular to a division line, which extends across the utilization area and ends in the division line between the core area and the utilization area* (clm. 1), *the radial distance of the recess to the outer edge of the chipping tools is approximately 5%* (clm. 6), *maximal angular distance of the recess to the axis of rotation is 120°* (clm. 7) and *plurality of recesses* (clm. 21, 23) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure

Art Unit: 3725

must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. With regard to claim 1, neither the specification nor the drawings provide support for at least one recess...which *extends across the utilization area* and ends in the division line between the core area and the utilization area. Examiner notes the figures to depict the recess to extend across the core area and end in the division line between the core area and the utilization area. Furthermore, the specification and drawings define the utilization area to be free of any recess.

Art Unit: 3725

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 1-9, 21 and 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. With regard to claim 1, is not clear what is meant by "planiformly". Clarification is required.

Further regarding claim 1 the alternative language "and/or" renders the claim indefinite. For example, with regard to line 3 it is unclear if it the first and second tools constructed "planiformly" or if it is either the first or second tool that is constructed "planiformly". Likewise similar confusion results regarding claim 1, lines 6 and 8-10 and claim 5, line 2. Clarification is required.

Also regarding claim 1, lines 8-10 are confusing. For example, it is unclear how the chipping tools are divided into a core area which faces the carrier element and a utilization area *positioned opposite* the chipping tools, i.e., the chipping tool is comprised of both an utilization area and a core area, how can the utilization area be positioned opposite of the chipping tool when the utilization area is a portion of the chipping tool? Clarification is required.

The following do not have sufficient antecedent bases:

"*the radial distance*" (clm. 6, line 2), Examiner suggests, --a radial distance--

"*the outer edge*" (clm. 6, line 2), Examiner suggests, --an outer edge--

"*the diameter*" (clm. 6, line 3), Examiner suggests, --a diameter--

"*the maximal*" (clm. 7, line 2), Examiner suggests, --a maximal--

With regard to claims 1-10, 21 and 22 the claims should be reviewed for clarity, definiteness and antecedent basis concerns so as to facilitate a clear understanding of the claimed invention and proper application of the prior art. Accordingly no prior art has been applied to the claims, though the claims in their present form are not deemed allowable.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 25 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Fischer (3,678,883). With regard to claim 25, Fischer discloses a method for detecting a state of attrition of a chipping tool (10) provided in a chipping apparatus, the method comprising: inspecting an utilization area (14) of the chipping tool (fig. 1) for an aperture (43), the chipping tool having a core area (21) being positioned adjacent the utilization area (14, 16), the aperture (43) extending substantially through the core area (21) towards the utilization area (fig. 2); and determining a state of attrition of the utilization area (14) based on a diameter of the aperture (col. 3, lines 50-55).

With regard to claim 26, Fischer discloses at least one chipping tool (10) for chipping material, the chipping tool having a core area (21) and a utilization area (14), the core area being positioned adjacent to the utilization area (fig. 2), wherein an aperture (43) extends substantially

Art Unit: 3725

through the core area (21) towards the utilization area (14) and wherein a state of attrition of the utilization area (14) is determined on the basis of a diameter of the aperture.

Examiner notes that Fischer's tool (10) working as a drill will inherently create chipped or material shavings from the bored area of the workpiece/material, i.e., as the drilling tool (11) is rotated to create a bore in a workpiece, material is removed from the workpiece, the removed material being chips, thus a "chipping" tool.

As to the determining a state of attrition...based on a diameter (clm. 25) and state of attrition...is determined on the basis of a diameter (clm. 26), Examiner notes that Fischer discloses an attrition bore (43) having a diameter, thus determination of attrition (wear) is based on the presence of the diameter.

#### ***Allowable Subject Matter***

Claims 10-20, 23 and 24 are allowed.

The following is an Examiner's statement of reasons for allowance of claims 15-20: The prior art of record does not disclose or fairly suggest a *disk-shaped chipping tool or a carrier element arranged within a housing, at least one chipping tool fastened to the carrier element, wherein the at least one chipping tool is divided by a border into a utilization area and a core area along a length of the tool, wherein the core area has at least one bore formed therein, the at least one bore extends through the core area and terminates at the utilization area* in combination with the rest of the claimed limitations as set forth in claims 10 and 15.

The prior art reference, Fischer (3,678,883) discloses an earth boring drill comprising a shaft/journal (11) to which tool (14, 21) is affixed. Fischer discloses a tool to have two parts, a

Art Unit: 3725

utilization portion (14) having projecting teeth (16) and a core portion/area (21) having a shared boundary to the journal/shaft (11). Further it is the utilization area (14, 16) that contacts a surface for machining. Fischer discloses a boundary line between the utilization area (14) and the core portion (21; fig. 2). Fischer further discloses a core area of the tool (21) has a bored hole (43) having parallel boundary walls and the bore terminating in the boundary (figs. 2, 5) line between the utilization area (14) and the core area (21). Fischer teaches that during the drilling operation the utilization area is subjected to wear due to repeated use and is ultimately worn to the core area (21), once worn to the core area (21) the bore (43) containing a wear indicator (44) releases a signal such that operation can be halted so as not to cause unnecessary damage. Fischer does not disclose a *disk-shaped* chipping tool. Instead, Fischer discloses a non-planer cylindrically extending tool/bit. Further, Fischer does not disclose *a carrier element arranged within a housing, at least one chipping tool fastened to the carrier element*, instead Fischer discloses a boring drill (fig. 1) fastened to a carrier element (11) unassociated with any housing. Accordingly, Fischer fails to anticipate or render obvious the claimed invention as set forth in claims 10 and 15.

Although Fischer discloses a tool having both a utilization area and core area, Fischer's tool is not disk shaped. Fischer's non-planar cylindrical shape differs from that of Applicant's disk-shape; because Applicant's specification/drawings (figs. 1, 3) clearly defines a disk-shape as a circular planar surface, Applicant's claimed invention as set forth in claim 10 patentably distinguishes over the prior art, Fischer.



Thus, neither the prior art of record nor any combination thereof discloses the claimed invention as set forth in claims 10 and 15. Accordingly claims 10-20, 23 and 24 are deemed allowable over the prior art of record.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shelley Self whose telephone number is (571) 272-4524. The examiner can normally be reached Mon-Fri from 8:30am to 5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Derris Banks can be reached at (571) 272-4419. The fax phone numbers for the organization where this application or proceeding is assigned are (571) 273-8300 for regular and After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on accessing the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SSelf  
October 21, 2005